CLAIMS:

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- 1. An X-ray apparatus (10) which comprises a first data transmission unit (101) for generating and transmitting a first data set which comprises selected and/or automatically adjusted parameters of an X-ray exposure to a further data transmission unit (201; 305; 401).
- A data processing unit (20) for processing the image data of an X-ray exposure made by means of an X-ray apparatus (10), which data processing unit comprises a second data transmission unit (201) for receiving a first data set which comprises at least the selected and/or automatically adjusted parameters of the X-ray exposure as well as for forming a fourth data set which comprises an association between the parameters of the X-ray exposure, predetermined patient data as well as the image data of the X-ray exposure.
 - 3. A mobile patient data terminal (30) which comprises a third data transmission unit (305) for receiving a first data set which comprises the selected and/or automatically adjusted parameters of an X-ray exposure as well as for forming a second data set whereby predetermined patient data is associated with the parameters of the X-ray exposure.
 - 4. A mobile patient data terminal (30) as claimed in claim 3, comprising a bar code scanner (306) for detecting an image cassette identification number as well as for forming a third data set by adding the image cassette identification number to the second data set.
 - 5. A mobile patient data terminal (30) as claimed in claim 4, in which the third data transmission unit (305) is arranged to transmit the third data set formed to a data processing unit (20) as claimed in claim 2.
 - 6. A diagnostic X-ray system which comprises a mobile X-ray apparatus (10) as claimed in claim 1 as well as a data processing unit (20) as claimed in claim 2.

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- 7. A system as claimed in claim 6 which comprises a mobile patient data terminal (30) as claimed in claim 3.
- 8. A method for the transmission of data in a diagnostic X-ray system, notably as claimed in claim 6 or 7, in which subsequent to the execution of an X-ray exposure in an X-ray apparatus (10) the parameters selected and/or automatically adjusted for the X-ray exposure are combined so as to form a first data set which is transmitted to a further component (20; 30) of the system.
- 9. A method as claimed in claim 8, in which the first data set formed by the X-ray apparatus (10) is transmitted to a mobile patient data terminal (30) and a third data set is formed therefrom, which third data set comprises the parameters of the X-ray exposure, preselectable patient data as well as an identification number of the image cassette on which the relevant X-ray exposure is stored.

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10. A method as claimed in claim 9, in which the third data set formed by the mobile patient data terminal (30) is transmitted to a data processing unit (20) and a fourth data set is formed therefrom, which fourth data set comprises the parameters of the X-ray exposure, preselectable patient data as well as the image data of the X-ray exposure.